ICTGAM525 Apply digital texturing for the 3-D environment in digital games

Release: 1
ICTGAM525 Apply digital texturing for the 3-D environment in digital games

Modification History

<table>
<thead>
<tr>
<th>Release</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Release 1</td>
<td>This version first released with ICT Information and Communications Technology Training Package Version 1.0.</td>
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</tbody>
</table>

Application

This unit describes the skills and knowledge required to research, select techniques, and apply industry standard graphic software tools, to digital texturing for the 3-D environment in digital games.

It applies to individuals with high-level technical, interpretive and communication skills and may be applicable to concept artists, game designers, games programmers, animators and other personnel working in the game development industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Game development
Elements and Performance Criteria

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
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<tr>
<td>Elements describe the essential outcomes.</td>
<td>Performance criteria describe the performance needed to demonstrate achievement of the element.</td>
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</table>
| 1. Research common industry practices for texturing a 3-D environment | 1.1 Research, identify and describe the methods of texture creation and texture mapping  
1.2 Choose a suitable graphics software to create textures  
1.3 Document the design considerations for texturing a 3-D environment |
| 2. Create a basic 3-D environment | 2.1 Use 3-D modelling and animation software  
2.2 Create simple 3-D objects  
2.3 Place the objects in a 3-D environment  
2.4 Apply inbuilt lighting effects to the 3-D environment |
| 3. Create multiple textures to apply to the 3-D environment | 3.1 Use graphics software  
3.2 Apply industry-standard methods to create the textures  
3.3 Create textures to establish the look, and the feel, of the 3-D environment |
| 4. Apply multiple texture effects to a 3-D environment | 4.1 Load the textures into the 3-D animation and modelling software  
4.2 Apply the textures to colour the 3-D objects and environment  
4.3 Use texture-mapping techniques to create multiple texture effects for a single 3-D object  
4.4 Employ 3-D animation and modelling software to render an image of the 3-D environment |
Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

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<tr>
<th>Skill</th>
<th>Performance Criteria</th>
<th>Description</th>
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| Reading        | 1.1                 | • Researches common industry practices to interpret technical design terminology  
• Interprets and comprehends a large range of diagrams, icons, symbols, text, numbers and letters, necessary to use complex design software  |
| Writing        | 1.1, 1.3            | • Uses correct spelling and grammar, plain English, specific terminology and appropriate document layout when documenting methodologies and design considerations  |
| Numeracy       | 2.1, 2.2, 2.3       | • Uses whole numbers, decimals and percentages relevant to measurement, resolution aspect ratio, pixel ratio, scale, coordinates, colour, shading, and other attributes/variables in the application of digital effects  |
| Get the work done | 1.1-1.3, 2.1-2.4, 3.1-3.3, 4.1-4.4 | • Plans, organises and completes tasks according to defined requirements and schedules  
• Makes decisions directly related to completion of required tasks  
• Uses creativity and initiative to visualise concepts  
• Actively sources, analyses and evaluates methodologies and software with the potential to meet 3-D texturing requirements  
• Uses key features of specific digital systems and software to complete design and creation tasks  |

Unit Mapping Information

<table>
<thead>
<tr>
<th>Code and title current version</th>
<th>Code and title previous version</th>
<th>Comments</th>
<th>Equivalence status</th>
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<tbody>
<tr>
<td>ICTGAM525 Apply digital texturing for the 3-D environment in digital games</td>
<td>ICAGAM525A Apply digital texturing for the 3-D environment in digital games</td>
<td>Updated to meet Standards for Training Packages</td>
<td>Equivalent unit</td>
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Links

Companion volumes available from the IBSA website: